

### **Remarks**

Reconsideration of the application is respectfully requested in view of the following remarks. Upon entry of this response, claims 4-7, and 13-26 remain in the application. Claims 1-3 and 8-12 have previously been canceled without prejudice.

### ***Telephonic Interview***

Applicants wish to thank the Examiner for extending a telephonic Examiner Interview on July 30, 2008. The amendments to claims 6, 7, and the cited art were discussed. Applicants thank the Examiner for stating that the proposed amendment appears to overcome the art rejection of record. However, applicants understand that, upon receipt of this amendment, the application will be fully reviewed.

### **Claim Rejections Under 35 USC § 101**

The Office action (Action) rejects claims 13-19, 22 and 23 as directed to non-statutory subject matter.

#### ***Claim 13.***

The action states that Claim 13 is “drawn to functional descriptive material recorded on a machine readable medium.” This is incorrect. Claim 13 is a method claim, and as such is statutory. For at least this reason, Applicants request removal of claim 13’s rejection under 35 USC § 101.

#### ***Claims 14-19, and 22-23.***

The action states that Claim 14 is “drawn to functional descriptive material recorded on a machine readable medium,” and, that “normally the claim would be statutory,” but alleges that pages 3 and 4 of the Specification define non-statutory subject matter “such as ‘control data can be transmitted using a conventional protocol (e.g. TCP/IP) and modulated onto a suitable carrier frequency for distribution over the network.’” [Action, page 3.] Applicants respectfully disagree.

A signal claim is only not patentable when the claim recites **only** the signal. See MPEP 2106.IV.B, quoted below:

For example, a claim reciting **only** a musical composition, literary work, compilation of data, **signal**, or legal document (e.g., an insurance policy) *per se* does not appear to be a process, machine, manufacture, or composition of matter. See, e.g., *In re Nuijten*, Docket no. 2006-1371 (Fed. Cir. Sept. 20, 2007)(slip. op. at 18)("A transitory, propagating signal like Nuijten's is not a 'process, machine, manufacture, or composition of matter.' ... Thus, such a signal cannot be patentable subject matter."). MPEP 2106.IV.B, emphasis added:

Claim 14 is not a signal claim, let alone "only ... a signal claim." For at least this reason, claim 14 is statutory. Moreover, the passages quoted by the Action refer to standard protocols which can certainly be used in patentable processes, methods, etc. For this further reason, claim 14 is patentable. However, to further prosecution, claim 14 and its dependent claims 15-19, and 22-23 have been amended to recite a "computer readable storage medium." Applicants now contend that claims 14-19, and 22-23 are even more fully statutory under 35 USC § 101.

For at least this reason, Applicants request removal of claims 14-19, and 22-23 rejection under 35 USC § 101.

#### **Claim Rejections Under 35 USC § 103(a)**

To establish a *prima facie* case of obviousness, the prior art reference (or references when combined) must teach or suggest all the claim limitations. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). "All the words in a claim must be considered in judging the patentability of that claim against the prior art." In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

#### ***Claims Rejected Over a Proposed Herz-Connelly-Alexander Combination***

The Action asserts that claims 13, 4 and 5 are unpatentable over Herz, U.S. Patent No. 5,758,257 ("Herz") in view of Alexander, U.S. Patent No. 6,177,931 ("Alexander") and further in view of Connelly, U.S. Patent No. 6,144,376 ("Connelly").

##### ***Claim 13.***

Applicants respectfully assert that Herz, Alexander, and Connelly, either separately or in combination, fail to teach or suggest, at least, the language of claim 13 "in response to a query by a viewer transmitted from the controller to the interactive head-end," suggesting a specific

program to a viewer that the viewer has never watched, based upon similar preferences determined from said affinity grouping....” [Emphasis added.]

This amendment is supported in the Specification at, e.g., page 16, lines 3-15, reproduced below:

Yet another feature of the illustrated embodiment is an arrangement by which the system can suggest programming that may be enjoyed by different users. The system compiles profiles of each user’s viewing habits (e.g. Viewer A’s favorite shows appear to be (a) 60 Minutes, (b) StarTrek Voyager, and (c) Dharma and Greg; the profile includes less-frequently viewed programs as well). Each such profile is correlated with other viewers’ profiles to find affinity groupings of users with similar profiles. Viewing suggestions can then be made based on the system’s determination of other programming that is popular among other members of the group. For example, from an analysis of the profiles of viewers most closely correlated with Viewer A, the system may note that a significant number also watches Third Rock From the Sun. System records may show that Viewer A has never watched this program and the system may thus propose (either in response to a viewer’s query or autonomously) that Viewer A may enjoy Third Rock From the Sun. Specification, page 16, lines 3-15.

Herz, to Applicants’ knowledge, does not mention the system in response to a query by the viewer, suggesting a specific program to a viewer. The system of Herz transmits video information to set-top boxes. At the most, a two-way video distribution system is described which transmits “customer profile information and viewing habit information” only “on a periodic basis for updating the agreement matrices on a system level....” [Herz, 41:57-64.] The reason given to allow the two-way transmission is “to determine what video programs should be transmitted in particular time slots.” [Id.] Herz, thus, teaches away from “a query by a viewer transmitted from the controller to the interactive head-end” as users cannot send a query to the head-end.

Moreover, neither Connelly nor Alexander, either separately or in combination with Herz, teach or suggest the above claim language.

For at least these reasons, claim 13 is allowable. Such action is respectfully requested.

*Claims 4 and 5.*

Claims 4 and 5 depend ultimately from allowable claim 13. Since they depend from an allowable claim, they should be allowed for at least the reasons stated for claim 13. Applicants also point out these claims recite novel and nonobvious features allowable over the proposed Herz- Connelly -Alexander combination. Claims 4 and 5 should be allowable. Such action is respectfully requested.

***Claims Rejected Over a Proposed Herz-Yoshinobu-Alexander-Smith Combination***

The Office asserts that claims 6, 20, and 21 are unpatentable over Herz, in view of Yoshinobu, U.S. Patent No. 5,734,444 ("Yoshinobu") further in view of Alexander and further in view of Smith, U.S. Patent No. 5,933,141 (Smith).

*Claim 6.*

Applicants respectfully assert that Herz, Yoshinobu, Alexander, and Smith, either separately or in combination, fail to teach or suggest, at least, the language of claim 6 "correlating similar profiles into affinity groupings; in response to a query by a viewer transmitted from the controller to the interactive head-end, suggesting a specific program to a viewer that the viewer has never watched, based upon similar preferences determined from said affinity groupings...." [Emphasis added.]

This amendment is supported in the Specification at, e.g., page 16, lines 3-15, reproduced below:

Yet another feature of the illustrated embodiment is an arrangement by which the system can suggest programming that may be enjoyed by different users. The system compiles profiles of each user's viewing habits (e.g. Viewer A's favorite shows appear to be (a) 60 Minutes, (b) StarTrek Voyager, and (c) Dharma and Greg; the profile includes less-frequently viewed programs as well). Each such profile is correlated with other viewers' profiles to find affinity groupings of users with similar profiles. Viewing suggestions can then be made based on the system's determination of other programming that is popular among other members of the group. For example, from an analysis of the profiles of viewers most closely correlated with Viewer A, the system may note that a significant number also watches Third Rock From the Sun. System records may show that Viewer A has never watched this program and the system may thus propose (either in response to a viewer's query or autonomously) that Viewer A may enjoy Third Rock From the Sun. Specification, page 16, lines 3-15.

Herz, to Applicants' knowledge, does not mention the system in response to a query by the viewer, suggesting a specific program to a viewer. The system of Herz transmits video information to set-top boxes. At the most, a two-way video distribution system is described which transmits "customer profile information and viewing habit information" only "on a periodic basis for updating the agreement matrices on a system level...." [Herz, 41:57-64.] The reason given to allow the two-way transmission is "to determine what video programs should be transmitted in particular time slots." [Id.] Herz, thus, teaches away from "in response to a query by a viewer transmitted from the controller to the interactive head-end" as users cannot send a query to the head-end.

Moreover, neither Yoshinobu, Alexander, nor Smith, either separately or in combination with Herz, teach or suggest the above claim language.

For at least these reasons, claim 6 is allowable. Such action is respectfully requested.

#### *Claims 20 and 21.*

Claims 20 and 21 depend ultimately from allowable claim 6. Since they depend from an allowable claim, they should be allowed for at least the reasons stated for claim 6. Applicants also point out these claim recites novel and nonobvious features allowable over the proposed Herz – Yoshinobu – Alexander - Smith combination. Claims 20 and 21 should be allowable. Such action is respectfully requested.

#### ***Claims Rejected Over a Proposed Herz-Yoshinobu-Alexander-Smith -Lazarus Combination***

The Office asserts a rejection of claims 7 and 14-18 as obvious over Herz and Yoshinobu, in view of Alexander, further in view of Smith and further in view of Lazarus, U.S. Patent No. 5,652,613 ("Lazarus").

#### *Claim 7.*

Applicants respectfully assert that Herz, Yoshinobu, Alexander, and Smith, either separately or in combination, fail to teach or suggest, at least, the language of claim 7 "in response to a query by the user transmitted from the interactive controller to the interactive head-end, suggesting a video program to the user that the viewer has never watched, based upon similar preferences of other viewers determined from said monitoring...."

This amendment is supported in the Specification at, e.g., page 16, lines 3-15, reproduced below:

Yet another feature of the illustrated embodiment is an arrangement by which the system can suggest programming that may be enjoyed by different users. The system compiles profiles of each user's viewing habits (e.g. Viewer A's favorite shows appear to be (a) 60 Minutes, (b) StarTrek Voyager, and (c) Dharma and Greg; the profile includes less-frequently viewed programs as well). Each such profile is correlated with other viewers' profiles to find affinity groupings of users with similar profiles. Viewing suggestions can then be made based on the system's determination of other programming that is popular among other members of the group. For example, from an analysis of the profiles of viewers most closely correlated with Viewer A, the system may note that a significant number also watches Third Rock From the Sun. System records may show that Viewer A has never watched this program and the system may thus propose (either in response to a viewer's query or autonomously) that Viewer A may enjoy Third Rock From the Sun. Specification, page 16, lines 3-15.

Herz, to Applicants' knowledge, does not mention, e.g., "in response to a query by the user transmitted from the interactive controller to the interactive head-end, suggesting a video program to the user that the viewer has never watched...." The system of Herz transmits video information to set-top boxes. At the most, a two-way video distribution system is described which transmits "customer profile information and viewing habit information" only "on a periodic basis for updating the agreement matrices on a system level...." [Herz, 41:57-64.] The reason given in Herz to allow the two-way transmission is "to determine what video programs should be transmitted in particular time slots." [*Id.*] Herz, thus, teaches away from "in response to a query by the user transmitted from the interactive controller to the interactive head-end...." as users cannot send a query to the head-end.

Moreover, neither Yoshinobu, Alexander, nor Smith, either separately or in combination with Herz, teach or suggest the above claim language.

For at least these reasons, claim 7 is allowable. Such action is respectfully requested.

*Claim 14.*

Applicants respectfully assert that Herz, Yoshinobu, Alexander, and Smith, either separately or in combination, fail to teach or suggest, at least, the language of claim 14 "in response to a query by the first user transmitted from the interactive controller to the interactive

head-end, instructions for suggesting a video program to the first user that the first user has never watched, based upon similar preferences of other viewers within the affinity grouping....”

This amendment is supported in the Specification at, e.g., page 16, lines 3-15, reproduced below:

Yet another feature of the illustrated embodiment is an arrangement by which the system can suggest programming that may be enjoyed by different users. The system compiles profiles of each user's viewing habits (e.g. Viewer A's favorite shows appear to be (a) 60 Minutes, (b) StarTrek Voyager, and (c) Dharma and Greg; the profile includes less-frequently viewed programs as well). Each such profile is correlated with other viewers' profiles to find affinity groupings of users with similar profiles. Viewing suggestions can then be made based on the system's determination of other programming that is popular among other members of the group. For example, from an analysis of the profiles of viewers most closely correlated with Viewer A, the system may note that a significant number also watches Third Rock From the Sun. System records may show that Viewer A has never watched this program and the system may thus propose (either in response to a viewer's query or autonomously) that Viewer A may enjoy Third Rock From the Sun. Specification, page 16, lines 3-15.

Herz, to Applicants' knowledge, does not mention, e.g., “in response to a query by the first user transmitted from the interactive controller to the interactive head-end, instructions for suggesting a video program to the first user that the first user has never watched, based upon similar preferences of other viewers within the affinity grouping....” The system of Herz transmits video information to set-top boxes. At the most, a two-way video distribution system is described which transmits “customer profile information and viewing habit information” only “on a periodic basis for updating the agreement matrices on a system level....” [Herz, 41:57-64.] The reason given in Herz to allow the two-way transmission is “to determine what video programs should be transmitted in particular time slots.” [*Id.*] Herz, thus, teaches away from “in response to a query by the first user transmitted from the interactive controller to the interactive head-end....” as users cannot send a query to the head-end.

Moreover, neither Yoshinobu, Alexander, nor Smith, either separately or in combination with Herz, teach or suggest the above claim language.

For at least these reasons, claim 14 is allowable. Such action is respectfully requested.

*Claims 15-18.*

Claims 15-18 depend ultimately from allowable claim 14. Since they depend from an allowable claim, they should be allowed for at least the reasons stated for claim 14. Applicants also point out these claim recites novel and nonobvious features allowable over the proposed Herz – Yoshinobu – Alexander - Smith combination. Claims 15-18 should be allowable. Such action is respectfully requested.

***Claims Rejected Over a Proposed Herz-Yoshinobu-Alexander-Smith-Lazarus-Daniels Combination***

The Office asserts a rejection of claim 19 as obvious over Herz, Yoshinobu, and Alexander, in view of Smith in view of Lazarus, and further in view of Daniels, U.S. Patent Publication No. 2002/0032907 (“Daniels”). Applicants respectfully assert that claim 19 recites novel and nonobvious features allowable over the proposed Herz-Yoshinobu-Alexander-Smith-Lazarus-Daniels combination. Further, since it depends from allowable claim 14, it should be allowed for at least the reasons stated for claim 14. Claim 19 should be allowable. Such action is respectfully requested.

***Claims Rejected Over a Proposed Herz-Yoshinobu-Alexander-Smith-Okada Combination***

The Office asserts a rejection of claims 24-26 as being unpatentable over Herz in view of Yoshinobu, further in view of Alexander, further in view of Smith and further in view of Okada, U.S. Patent No. 7,095,949 (Okada). Applicants respectfully assert that claims 24-26 recite novel and nonobvious features allowable over the proposed Herz-Yoshinobu-Alexander-Smith-Okada combination. Further, since they ultimately depend from allowable claim 6, they should be allowed for at least the reasons stated for claim 6. Claims 24-26 should be allowable. Such action is respectfully requested.

***Claims Rejected Over a Proposed Herz-Yoshinobu-Alexander-Smith-Lazarus-Okada Combination***

The Office asserts a rejection of claims 22 and 23 as being unpatentable over Herz and Yoshinobu, in view of Alexander, further in view of Smith, further in view of Lazarus and



further in view of Okada. Applicants respectfully assert that claims 22 and 23 recite novel and nonobvious features allowable over the proposed Herz-Yoshinobu-Alexander-Smith-Lazarus-Okada combination. Further, since they depend from allowable claim 14, they should be allowed for at least the reasons stated for claim 14. Claims 22 and 23 should be allowable. Such action is respectfully requested.

#### **Formal Request For Interview**

Upon reviewing this response, if any issues remain, the Examiner is formally requested to contact the undersigned prior to issuance of the next Office Action in order to arrange a telephonic interview. It is believed that a brief discussion of the merits of the present application may expedite prosecution. Applicants submit the foregoing formal Response so that the Examiner may fully evaluate Applicants' position, thereby enabling the interview to be more focused. This request is being submitted under MPEP § 713.01, which indicates that an interview may be arranged in advance by a written request.

#### **Conclusion**

The claims in their present form should now be allowable. Such action is respectfully requested.

Respectfully submitted,

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